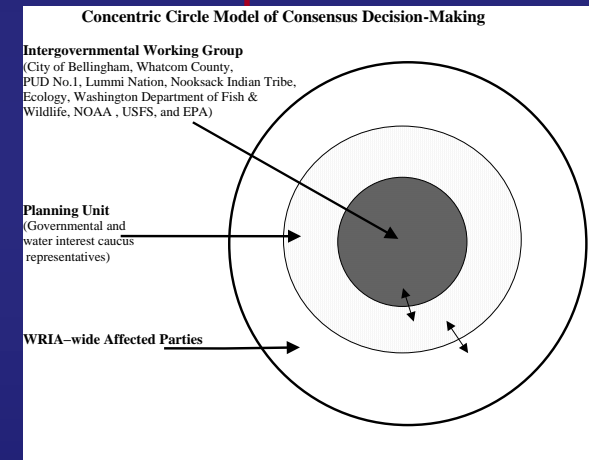
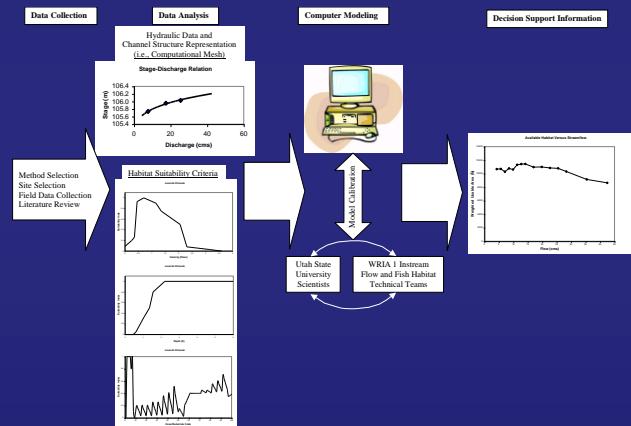


Overview of the Lummi Nation, Tribal Water Rights, Drainage/Flood Control, and Water Quality Issues



Lummi Natural Resources Department
Jeremy Freimund P.H., Water Resources Manager

Farm Water Meeting
Mt. Baker Rotary Building, Lynden Fairgrounds
January 20, 2014



Purpose Statement

- The purpose of this presentation is to:
 - Provide a brief overview of the Lummi Nation;
 - Describe water allocation practices in the western United States;
 - Summarize the legal context of tribal water rights;
 - Provide an overview of how the Lummi Nation is resolving conflicts over its water resources;
 - Identify the impacts of drainage and flood control;
 - Summarize water quality impacts on tribal interests;
 - Answer questions.

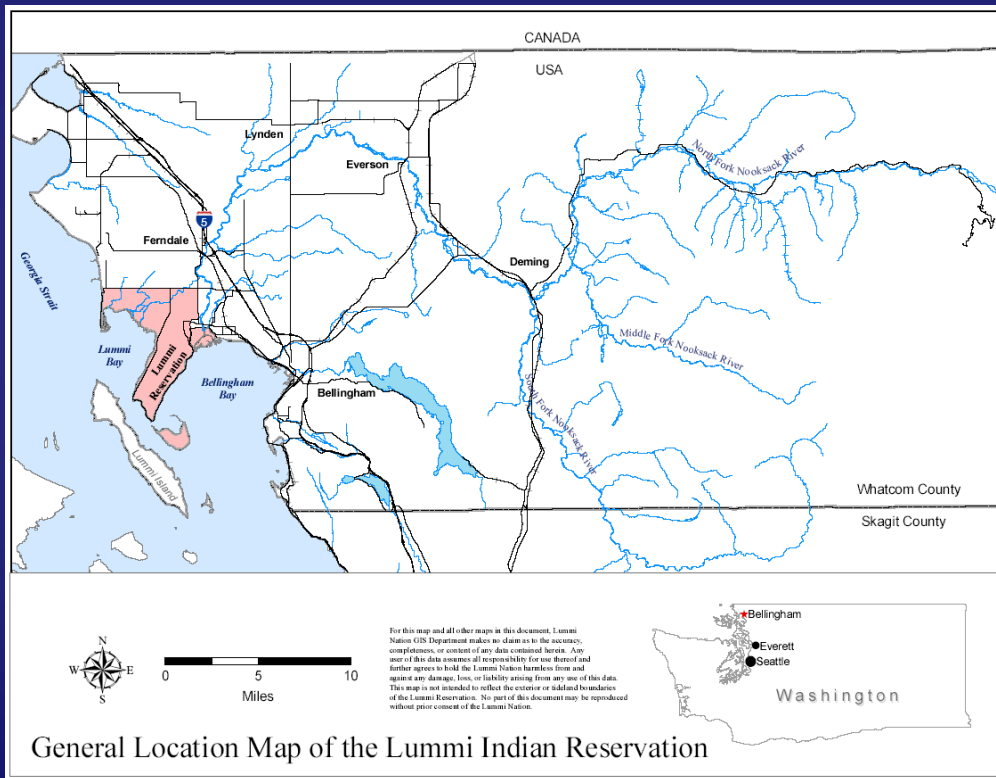
Lummi Nation Overview





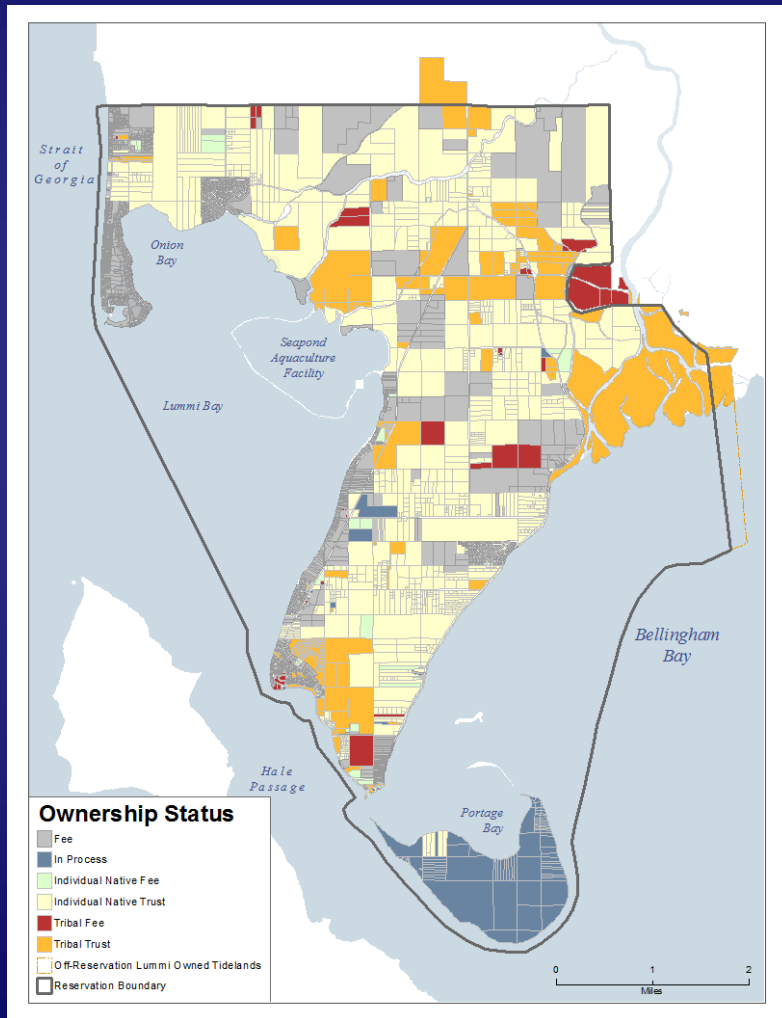
Brief History – the Reservation

- The Lummi Indian Reservation was created and reserved for the exclusive use of the Lummi people by the 1855 Point Elliot Treaty.
- The Reservation is intended to be a permanent, economically viable homeland for the Lummi people.





The Lummi Reservation Today



- The Lummi Reservation is comprised of approximately 12,500 acres of upland and about 7,000 acres of tidelands.
- The Lummi Nation and/or enrolled members own about 75 percent of uplands.
- The Lummi Nation owns 100 percent of the tidelands.

Lummi is a Fishing Tribe



Lummi is a Fishing Tribe





The Lummi People



- There are approximately 4,650 enrolled Lummi tribal members.
- Approximately 2,650 tribal members live on Reservation – the remainder live in the region or elsewhere.



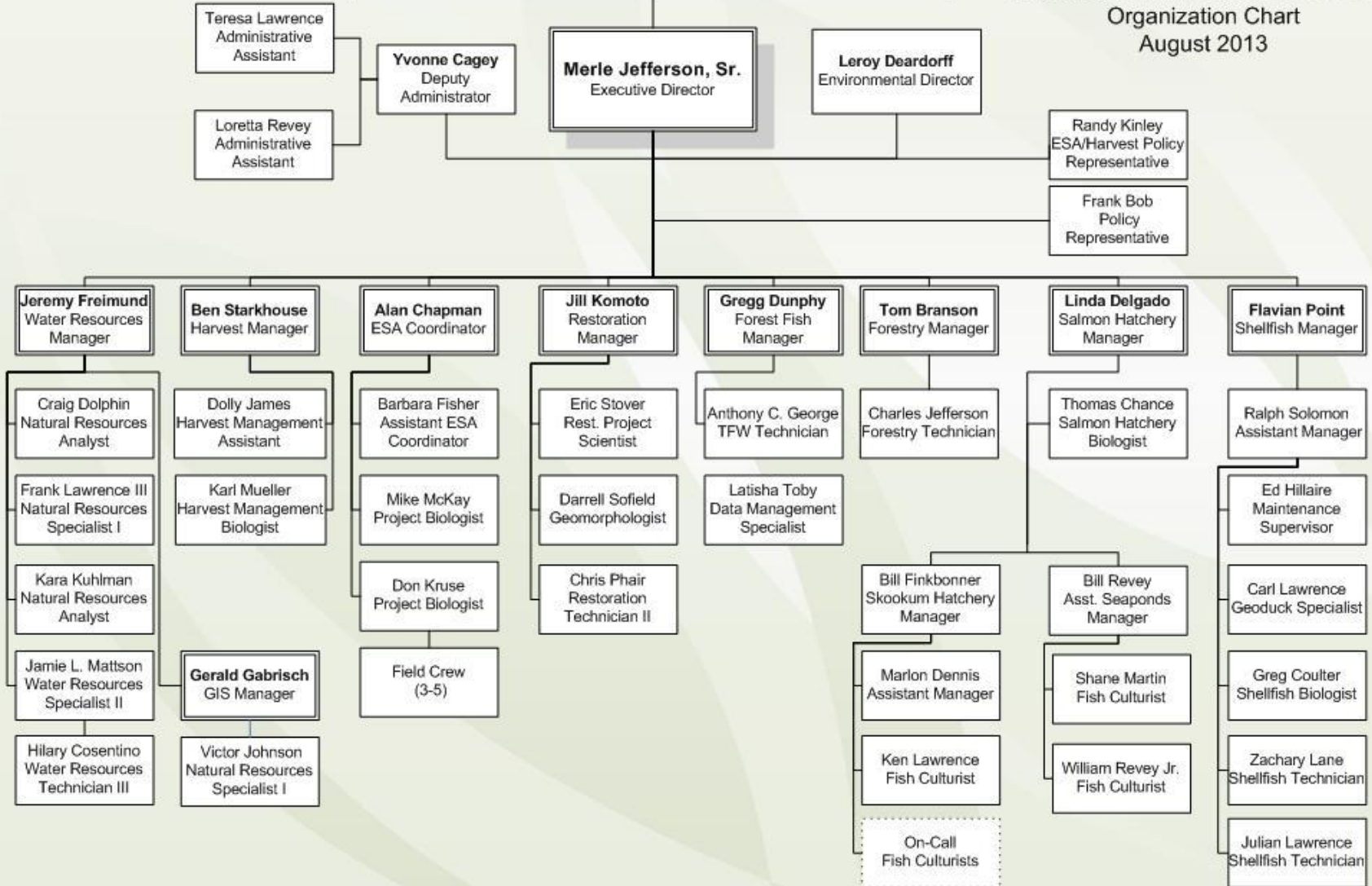
The Lummi Government

- The Lummi Nation is a sovereign government and has been since time immemorial.
- The Lummi Nation was one of ten tribes nationally that initiated the Self-Government Demonstration Project (1988).
- The Lummi Nation is governed by an elected 11 member Lummi Indian Business Council, various commissions, and the General Council (all voting enrolled members).
- There are numerous departments (e.g., Cultural, Economic Development, Police, Education, Health, Planning, Natural Resources), an independent Tribal Court system, and a Lummi Tribal Sewer and Water District.

Lummi Fisheries and Natural Resources Commission

Lummi Natural Resources

Organization Chart
August 2013



50 Staff Members

31 Tribal Members

19 Non-Tribal Members



Governmental Actions



- Create family wage jobs
 - Lummi government and enterprises combined are the 3rd largest employer in the Whatcom County area.
 - Tribal enterprises include the Silver Reef Hotel, Casino, & Spa; gas stations; mini-marts; Northwest Indian College; K-12 School.
- Seek new business opportunities to continue economic diversification and to increase self-reliance and economic independence.



Governmental Actions



- Promote education and opportunities for tribal youth (investing in human resources).
- Establish a regulatory framework to protect public health and welfare, natural resources, cultural resources, and to support economic development.
- Recently completed of a new tribal administrative building that includes a geothermal heat pump.
- See website (www.lummi-nsn.gov) for more information, Lummi Code of Laws, and the Lummi Nation Atlas.





Water Allocation in the Western United States

Water Allocation in the Western United States



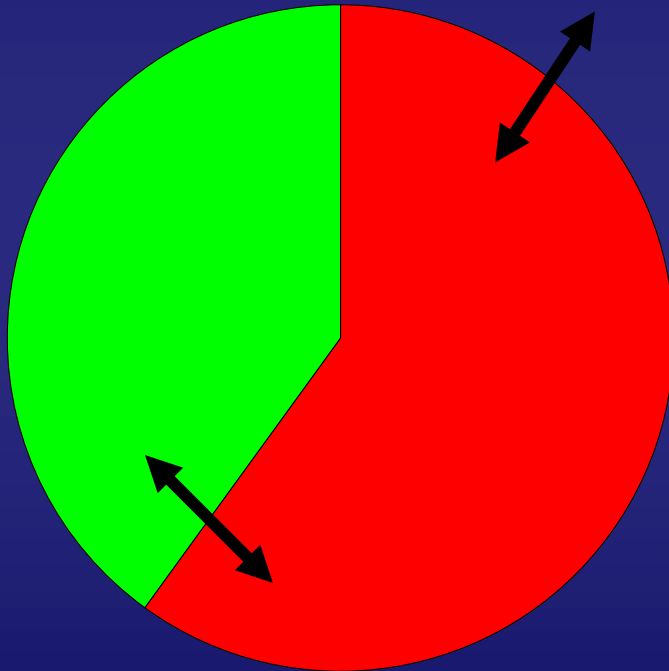
- Water is a limited resource both spatially and temporally.
- Due to the economic, environmental, and cultural importance of abundant and high quality water, water needs of different people often conflict.
- Although there are other allocation methods, the prior appropriation doctrine is the most widely used in the western United States and has been the foundation of Washington State water allocation since 1917.

Water Allocation in Western U.S.



- Prior Appropriation Doctrine
 - “First in time, first in right”
 - Uses of “senior” water right holder must be fully and completely satisfied before a more “junior” water rights holder can appropriate water
- As Indians were clearly here first and used and depended on abundant, high quality water, they have the most “senior” water rights.

Prior Appropriation



- $X - Y = Z$
- How big is the pie (X)?
- How big is the Tribal slice of pie (Y)?
- How much pie is left over for the State to divide up among the more junior water right holders (Z)?

Prior Appropriation (Lummi Reservation)



- The size of the pie affects the relative size of the tribal slice
 - On the Lummi Reservation, the amount of available ground water is less than the tribal need ($X < Y$).
 - Consequently, the tribal slice is the entire pie and there is no water left for allocation to other users.
 - Since the on-Reservation tribal demand can not be satisfied by the available Reservation water supply, the off-Reservation slice has to also include water to meet the on-Reservation demand.

Prior Appropriation (State)



- The water available to other water users (Z) is allocated by the state based on the state water right system administered by the Department of Ecology
- The state water management system is broken and needs to be fixed to ensure that the tribal water rights, once quantified, are protected.
 - For example, the Whatcom County agricultural community estimates that approximately 35 percent of Nooksack Basin farmers irrigate without water rights and up to 75 percent of farmers with water rights violate the terms of those rights in some form.



Legal Context of Tribal Water Rights – Federal Reserved Water Rights



Federal Reserved Water Rights

- Federal Reserved Water Rights doctrine comes from the interpretation of Indian treaties by the United States Supreme Court.
 - “treaty was not a grant of rights to the Indians, but a grant of rights from them....” (*United States v. Winans*, 1905)
 - Concept that when the United States established a reservation, the federal government implicitly reserved a quantity of water necessary to fulfill the “purposes of the Reservation” (*Winters v. United States*, 1908)



Federal Reserved Water Rights

- Priority date of Federal reserved water rights (a.k.a., *Winters* rights) is the date the reservation was established or time immemorial (depends on the purposes)
- The Winters Doctrine is the basis for federal reserved water rights for all federal reserves (e.g., national forests, wildlife refuges, national parks, Indian reservations, military bases)



Federal Reserved Water Rights

- Differences between federal reserved water rights and state water rights include:
 - The laws and treaties of the United States preempt state law - states may not limit or curtail the exercise of federal reserved water rights.
 - Under state water law, water must be put to continuous beneficial use to maintain and preserve a water right (“use it or lose it”).
 - In contrast, federal reserved/tribal water rights are “reserved” and do not expire with non-use.
 - Place and purpose of withdraw and use restrictions also apply to state water rights



Federal Reserved Water Rights

- Other Important Legal Concepts
 - *United States v. Washington* (Boldt Decision) tribes have a “right to water necessary to maintain fish...in order to fulfill the Indians’ treaty right to fish in all their usual and accustomed places.”
 - *United States v. Adair* identified the treaty water rights for hunting and fishing as having a priority date of time immemorial.
 - *United States and Lummi Nation v. State of Washington, et. al.*, reaffirmed that there is a federal reserved water right to ground water.



Lummi Nation Efforts to Resolve On-Reservation and Off-Reservation Water Rights Conflicts



Why We Are Doing It

- The Lummi Nation has a Treaty Right to water – this right needs to be protected.
- The Treaty right to water is both for consumptive uses and to support a sustainable, harvestable surplus of salmon.
- Water is a limited natural resource that is decreasing in quantity and quality while the demand for water is increasing.
- Securing/protecting water resources for future generations of tribal members is both time consuming and expensive.



Why We Are Doing It

- Because of the increasing competition for the limited resource, the sooner tribal water rights can be protected the easier and cheaper it can be accomplished for everyone.
- Cooperative approaches are preferable where possible because of financial costs and overall efficiency.



On-Reservation Water Supply

- Primary Activities to Ensure on-Reservation Water Supply:
 - Negotiations pursuant to Federal Criteria and Procedures
 - Litigation versus state and all ground water users
 - Settlement Implementation

Negotiation for On-Reservation Water



- In response to threats to tribal water supply, starting around 1993 Lummi worked with the Nooksack Tribe and Washington State to get the Department of Interior to appoint a federal team.
- Federal team was appointed during the summer of 1995 after a non-Indian water association complained about tribal water withdrawals.

Negotiations for On-Reservation Water



- Negotiate First then Litigate: Concept was to try to achieve a negotiated settlement and then take the settlement to federal court and bind everyone through a federal court consent decree.
- Lummi and the United States adopted parallel path: negotiate in good faith and simultaneously prepare for litigation (i.e., identify federal and tribal experts and conduct technical studies).

Negotiation/Litigation for On-Reservation Water

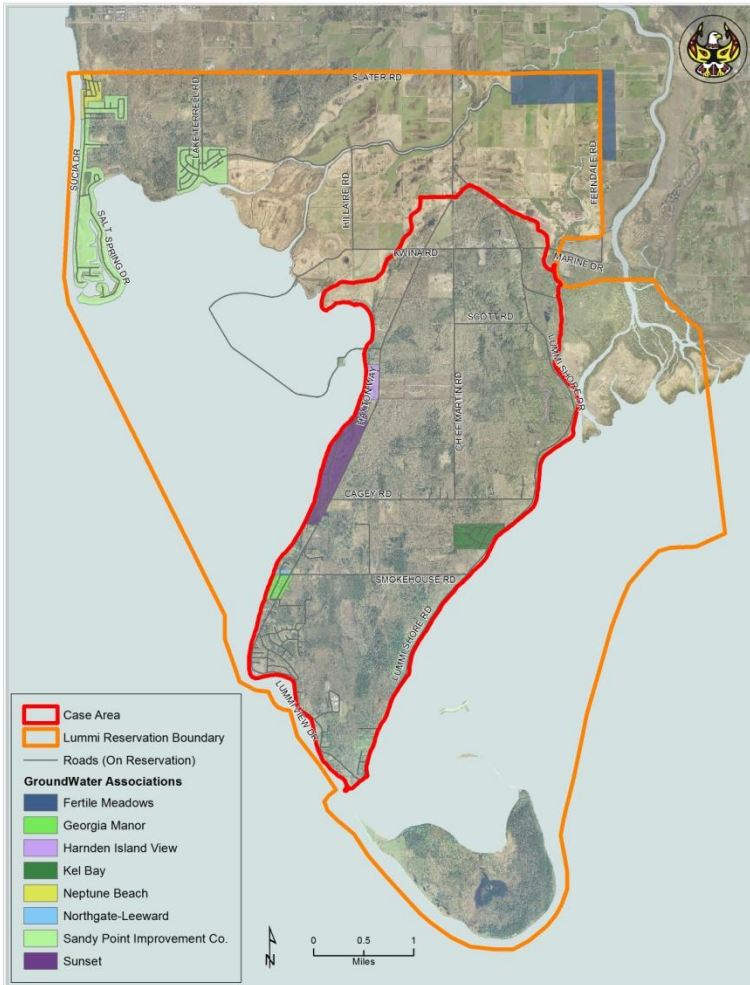


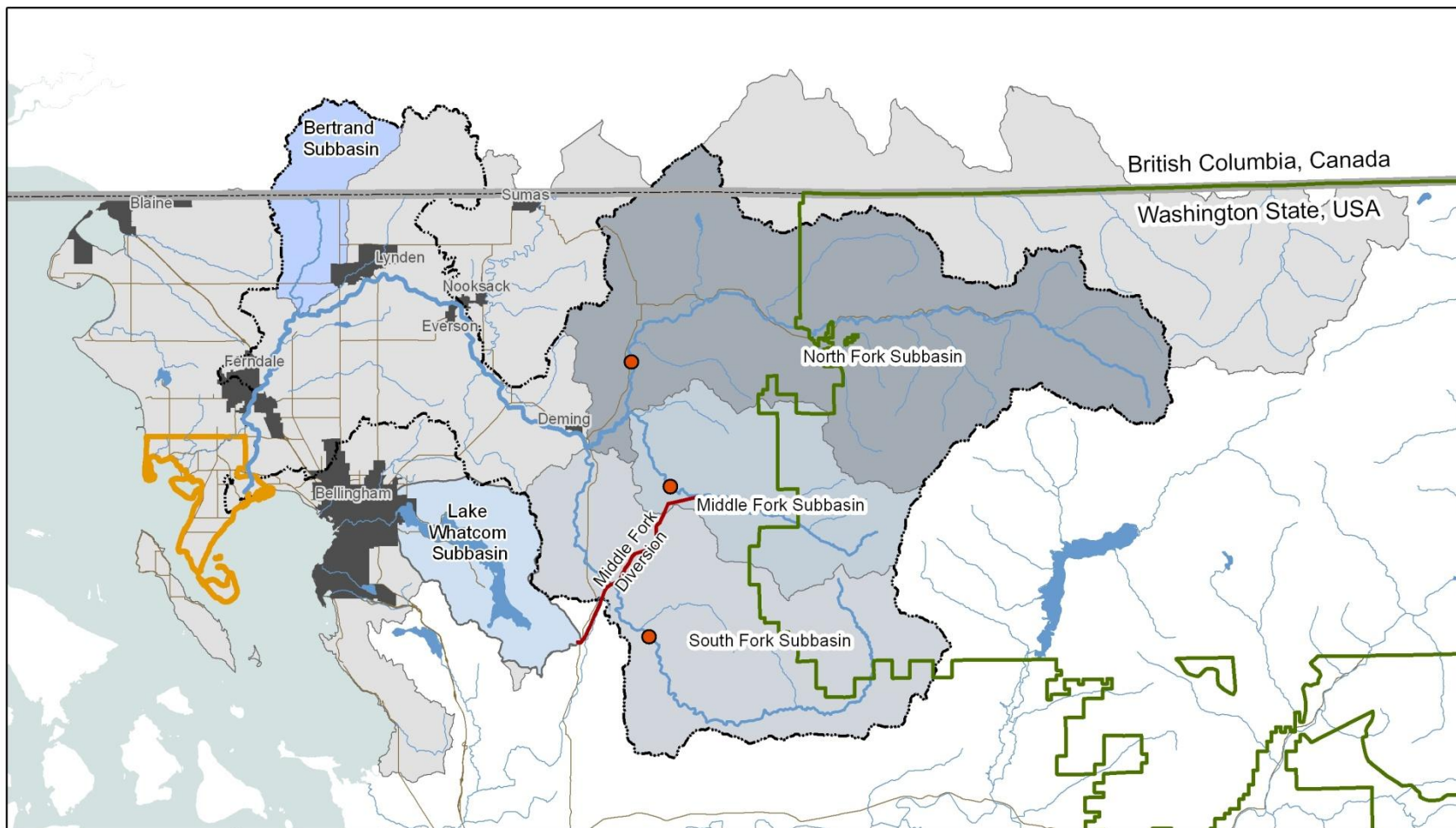
- Negotiations occurred from 1995 to 1999
- Negotiations collapsed during the summer of 1999 when non-Lummi walked away from the deal and stated that litigation was needed to resolve the conflict
- Litigation filed by the United States in 2001
- Negotiated settlement was approved by the Court in 2007
- Appeal to 9th Circuit was resolved in 2009
- Settlement Implementation continues

Litigation Over On-Reservation Water



- Litigation resolved the conflict over ground water only on the Lummi Peninsula part of the Reservation.
- Conflict remains over water for the remainder of the Reservation – the aquifer extends north of the Reservation.





WRIA 1 Major Subbasins

June-24-2009



0 5 10
Miles

Lummi Nation GIS Department makes no claim as to the accuracy, completeness, or content of any data contained herein. This map is not intended to reflect the extent of land boundaries of the Lummi Reservation. All warranties of fitness for a particular purpose and of merchantability are hereby disclaimed. No part of this document may be reproduced without prior consent of the Lummi Nation. Any user of this data assumes all responsibility for use thereof and further agrees to hold the Lummi Nation harmless from and against any damage loss of liability arising from any use of these data.

- Nooksack Basin
- WRIA1 Boundary
- Lummi Reservation
- Federal Lands
- City Limits
- Middle Fork Diversion
- USA-Canadian Border
- Primary Roads
- Gauge Stations



Cartography: Gerry Gabrisch gerald@lummi-nn.gov
Datum, Projection, Coordinate System: NAD83 UTM 10 N

Off-Reservation Water Resources Protection



- The Lummi Nation's primary focus related to resolving conflicts over water allocation in the Nooksack River watershed is the WRIA 1 Watershed Management Project
- The WRIA 1 Watershed Management Project evolved as a result of state legislation in 1998 known as the Watershed Planning Act (RCW 90.82)
- Additional information on the WRIA 1 Watershed Management Project is available on the project website: <http://wria1project.whatcomcounty.org>

Off-Reservation Water Resources Protection



- State law does not apply to the Lummi Nation. However, the Nation chose to participate in what became known as the WRIA 1 Watershed Management Project pursuant to the terms of a Memorandum of Agreement (MOA) between the “Initiating Governments”.
- “Initiating Governments” agreed that the relationship with Tribal governments must be government-to-government.

Off-Reservation Water Resources Protection



- Reasons for Lummi Nation participation in the WRIA 1 Watershed Management Project include:
 - Promoted conducting a single set of studies/analyses rather than at least three separate efforts as would likely occur under a litigation scenario.
 - More likely to efficiently solve water resource management problems if governments work together.
 - Working together promotes understanding and good relationships - litigation is generally adversarial and can result in bad relationships.

Instream Flow and Fish Habitat Technical Teams



- Instream Flow Technical Team Lead:
 - Jeremy Freimund (LIBC)
- Fish Habitat Technical Team Co-Leads:
 - Chris Fairbanks (PUD No. 1)
 - John Thompson (Whatcom County)
- Important other contributors/participants include:
 - Lummi Nation, Nooksack Tribe, WDFW, Ecology, Whatcom County, Utah State University, PUD No. 1, Bellingham, Diking and Drainage Caucus, Environmental Caucus
 - Water Quality Technical Team (Co-Leads: Sue Blake and Becky Peterson)
 - Water Quantity Technical Team (Lead: Llyn Doremus)



Overview of How Instream Flow Work Was Conducted

- Technical Phase
 - ☑ Identify the method(s)/best available science to estimate the relationship between stream flow and fish habitat quantity and quality
 - ☑ Apply selected methods
 - ☑ Recommend an initial ecological flow regime
- Selection and Adoption Phase
 - ☑ Agree to Instream Flow Selection and Adoption Action Plan
 - ☑ Apply the selection and adoption action plan
 - ☐ Adopt an instream flow regime.
- Consensus Decision Making Process

Off-Reservation Water Resources Protection



Concentric Circle Model of Consensus Decision-Making

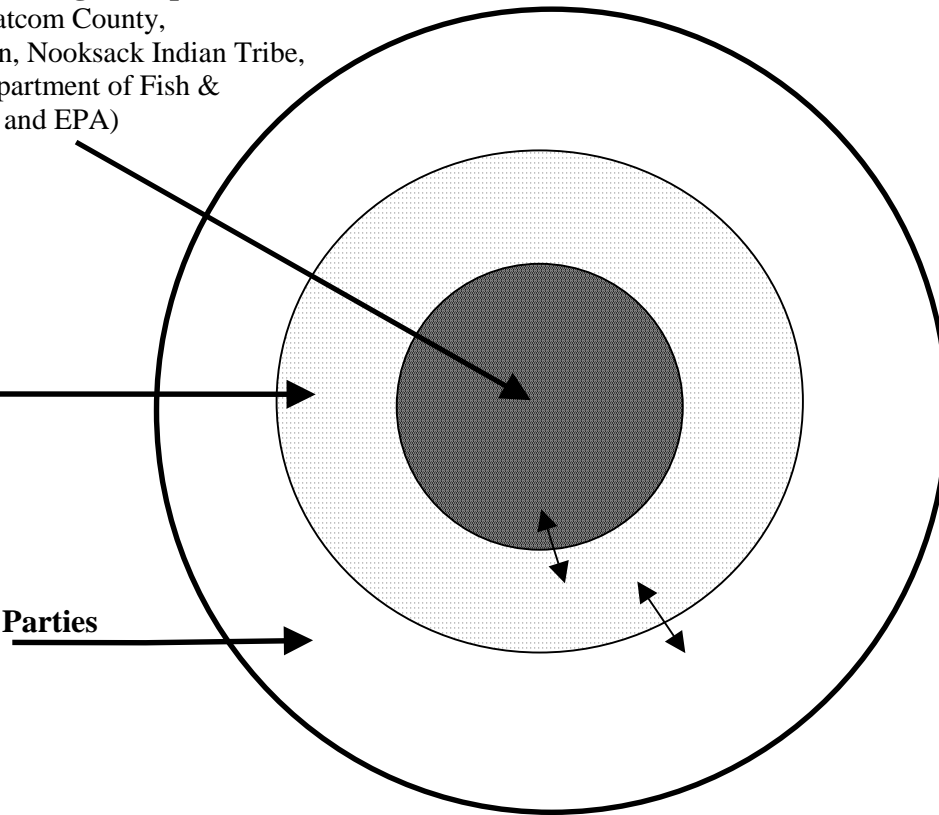
Intergovernmental Working Group

(City of Bellingham, Whatcom County, PUD No.1, Lummi Nation, Nooksack Indian Tribe, Ecology, Washington Department of Fish & Wildlife, NOAA, USFS, and EPA)

Planning Unit

(Governmental and water interest caucus representatives)

WRIA-wide Affected Parties



Off-Reservation Water Resources Protection



- Work on the two pilot watersheds was initiated after June 2005.
- Settlement proposals were developed and exchanged by the parties.
- Efforts in the Bertrand Creek watershed stalled during 2007 for a number of reasons including:
 - Parties realized that the limited geographic scope of the effort limited the settlement opportunities.
 - The Bertrand Creek watershed group did not have any authority to implement a settlement.
 - The Bertrand Creek watershed group did not want to reduce their out-of-stream water use – much of which is unpermitted under state law.

Off-Reservation Water Resources Protection



- Work in the Middle Fork Watershed stalled after April 2006 as the City of Bellingham considered the tribal settlement proposal.
- Work in the Middle Fork Watershed and a look also at the North Fork and South Fork subbasins resumed in October 2008.
- Efforts to reach a settlement continued from October 2008 to November 2010 with the parties meeting at least monthly and sometimes at two week intervals.
- On December 1, 2010, in coordination with the federal Solicitor's Office and the Nooksack Indian Tribe, Lummi issued a letter to Ecology notifying them that Lummi was suspending participation in negotiations.

Off-Reservation Water Resources Protection

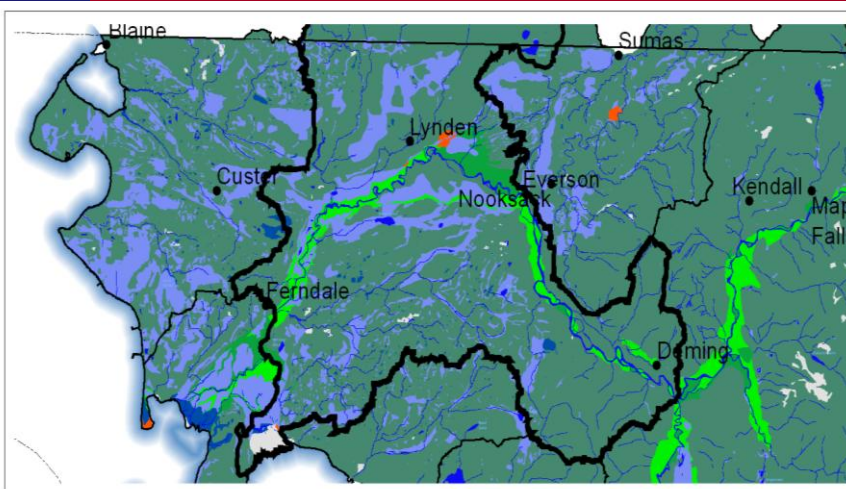


- The December 1, 2010 letter shared the Lummi Water Team perspective that resolution is more likely through the filing of a federal action to establish the tribal instream flow rights.
- Lummi submitted a litigation request to the United States during June 2011 seeking.
 - Quantification of the tribal instream flow right
 - Time immemorial priority date for this right
 - Protection from poor state management of water
- The United States has appointed a litigation team and hired technical experts.

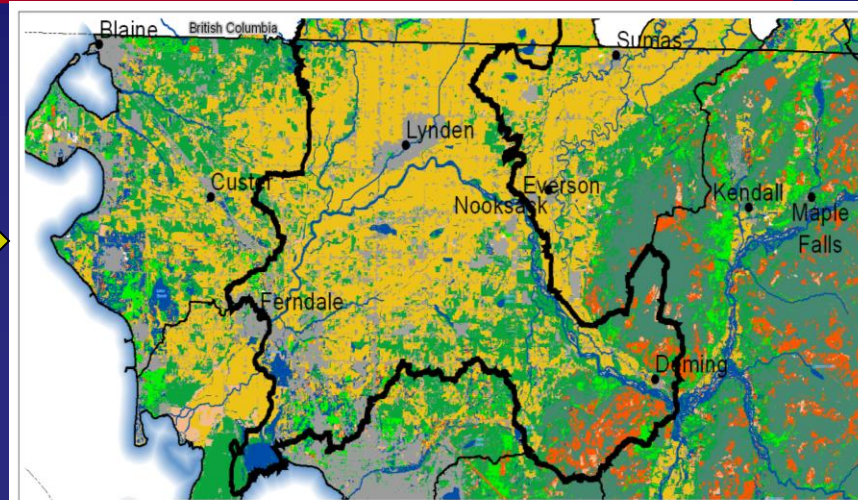


Impacts of Drainage and Flood Control

Lower Nooksack River Watershed Land Use Changes



Water Budget Historic Land Cover

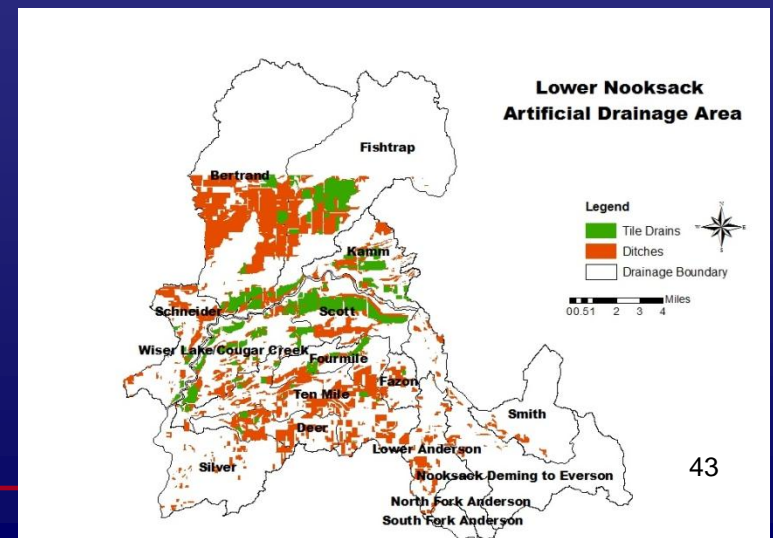


Water Budget Existing Land Cover 2006-2010

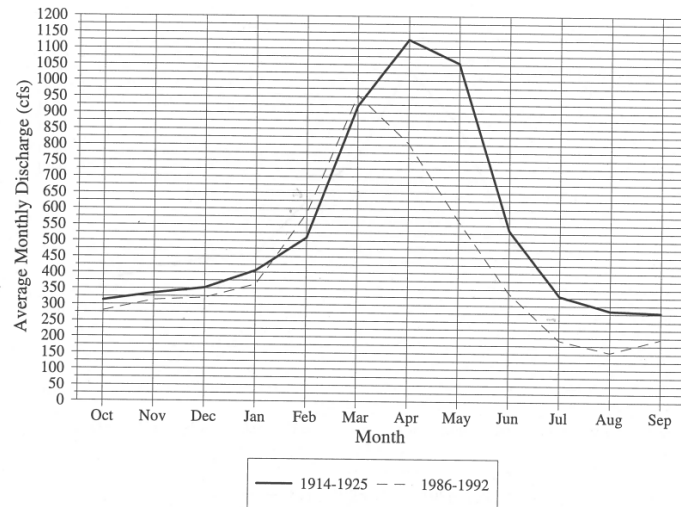
Map Key

Developed Surface	Deciduous Forest	Shrubland	Ice/Snow
Agriculture	Evergreen Forest	Gravel/Sand	Water/Wetland
Grassland	Mixed Forest	Bedrock	Woody Wetland

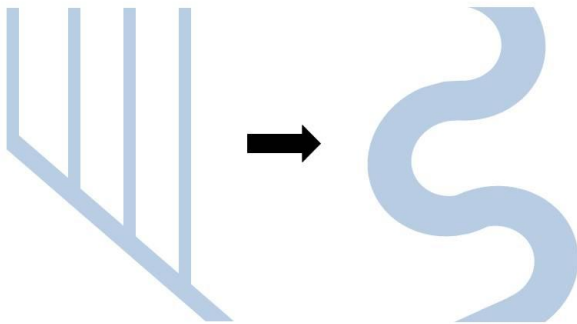
- Forest converted to Agriculture
- Agricultural Lands Drained



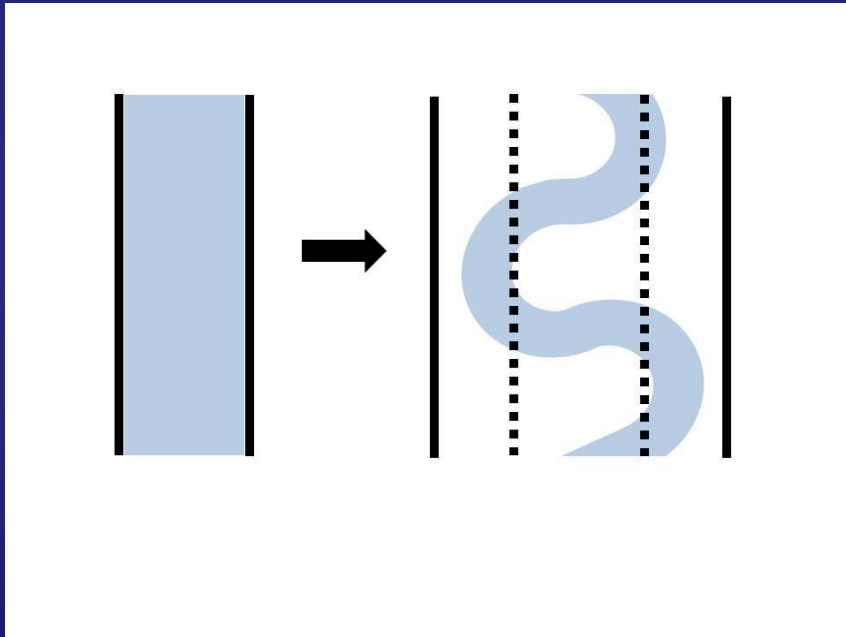
Drainage Impacts



- Drainage works to move water out of the system.
- Results in:
 - Earlier hydrograph peak – migration impacts.
 - Less water available in the system to support low flows during the summer months (migration, rearing).
 - Water distributed in multiple small channels

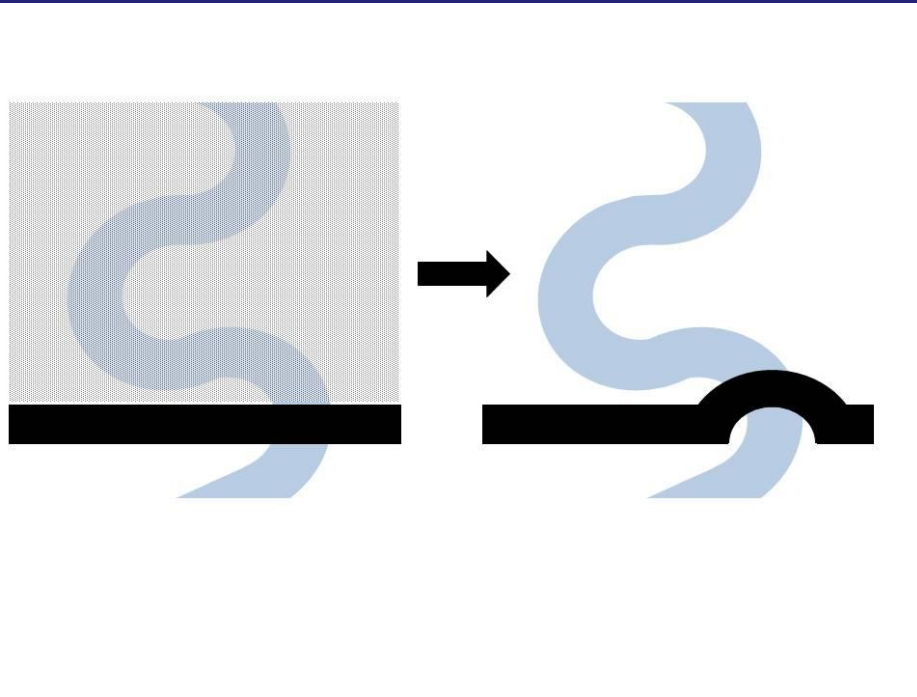


Flood Control Impacts



- Flood Control projects straighten channels and confine channels within levees to maximize cropland.
- Results in:
 - Reduced channel length = reduced fish habitat
 - Reduced off channel habitat
 - Non- or minimally functioning riparian zone
 - Degraded water quality

Drainage and Flood Control Impacts



- Road crossings can prevent access to fish habitat.
- Results in:
 - Reduced channel length = reduced fish habitat.
 - Less Fish



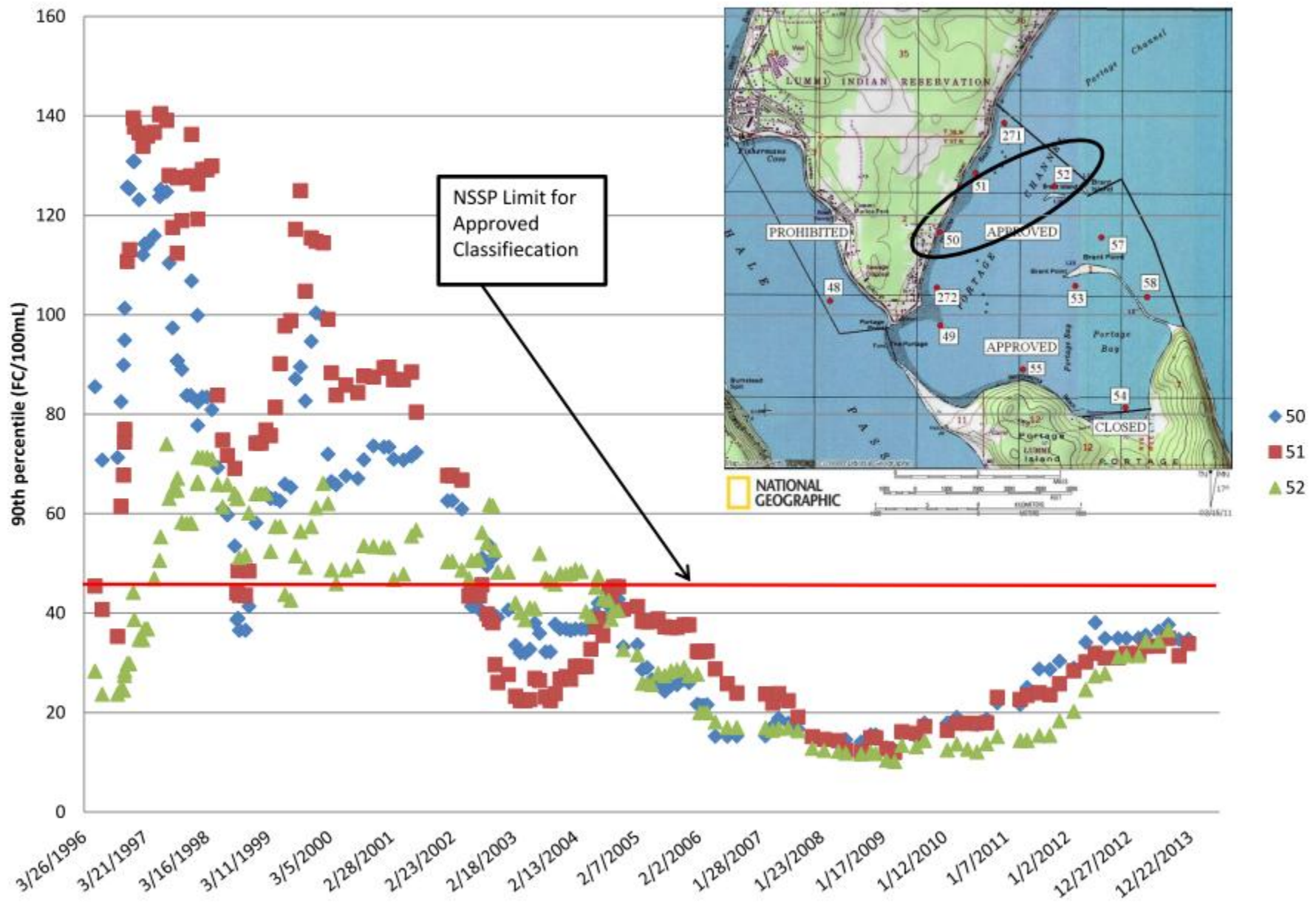
Water Quality Impacts of Agricultural Operations

Water Quality Impacts of Agricultural Operations



- Agricultural Land Use Practices can result in:
 - Degraded riparian zones
 - Direct animal access to streams
 - Pesticides and nutrient loading of streams
 - Direct or indirect manure discharges
- Degraded riparian zones result in:
 - Reduced shade and increased temperatures
 - Increased temperatures result in decreased DO
 - Reduced tree cover results in fewer insects
 - Invasive weeds (e.g., reed canarygrass)
- Manure discharges result in:
 - Public health threat and closed shellfish beds

Estimated 90th percentiles in Portage Bay



Lummi Peninsula

Restricted Area Totals

Manila Clams

39,342 lbs per year @ \$1.50 per lb = \$59,013 per year

Total value lost since 1998 = \$236,052

Pacific Oysters

116,660 gallons per harvest cycle (2 years) @ \$14 per gallon
= \$1,633,240 every 2 years

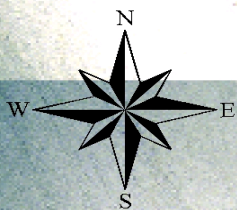
Total Value lost since 1996 = \$4,899,720

**Current Value Lost Per Year
= \$858,962 per year**

Approved Area Totals

Manila Clams

81,348 lbs per year @ \$1.50 per lb = \$122,022 per year



Legend

- Open Intertidal
- Closed Intertidal

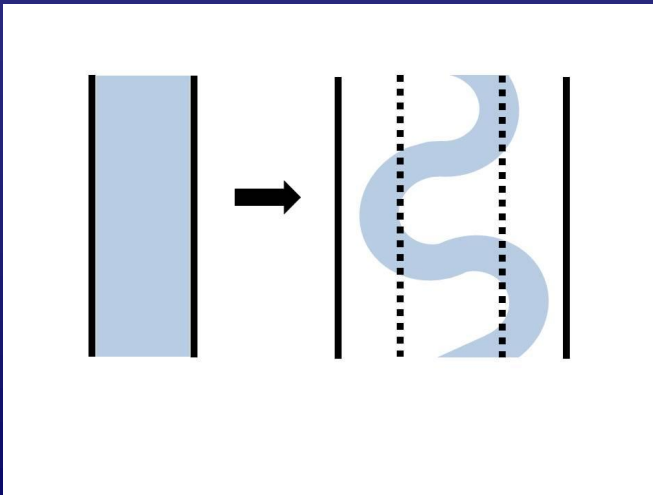
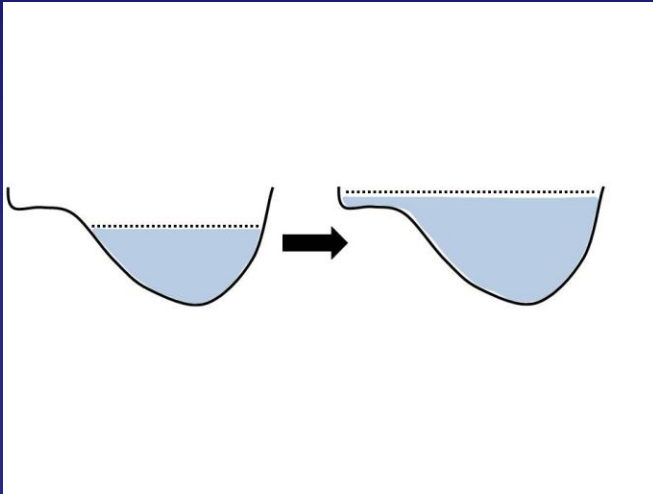
360 180 0 360 Meters

Portage Island



What Can the Agricultural Community Do to Address Impacts to Tribal Treaty Rights to Harvest Fish

What Can We Do to Protect Tribal Treaty Rights



- Increase stream flow
 - Modify drainage practices
 - Increase irrigation efficiency
 - Divert ground water rather than surface water
 - Flow augmentation/import
- Increase Channel Length
 - Use setback levees
 - Increase number of side channels
 - Improve riparian zone function
 - Remove passage barriers

What Can We Do to Protect Tribal Treaty Rights



- Protect Water Quality
 - Establish and maintain properly functioning riparian zones
 - Prevent direct animal access
 - Effectively implement nutrient management plans
 - Utilize Pesticide BMPs
- Work with tribes to jointly address challenges

Summary and Conclusion





Summary and Conclusions

- Water is critical to life on earth.
- The demand for water is increasing with increasing population while the supply is decreasing due to the effects of increasing population on water quality and quantity
- In the western United States, water is allocated based on priority - first in time is first in right.
- Tribal rights to water do not expire with non-use or the fact that some of their water rights are non-consumptive (instream flow).



Summary and Conclusions

- The Lummi Nation has a right to an adequate quantity and quality of water sufficient to support the purposes of their reservation as a permanent, economically viable homeland.
- The Lummi Nation also has a right to an adequate quantity and quality of water necessary to support a sustainable, harvestable surplus of salmon and shellfish sufficient to support the Lummi *Schelangen* (“way of life”).



Summary and Conclusions

- Tribal uses of water pre-date those of other community members which means they have the “senior” or highest priority water rights.
- Tribal water rights are generally not quantified which makes management and protection of water difficult for everyone.
- The Lummi Nation is actively seeking to quantify and protect their water supply (i.e., water rights) and water quality both on- and off-Reservation through negotiation if possible and through litigation if necessary.



Summary and Conclusions

- An agricultural economy and lifestyle can co-exist with a tribal economy and way of life.
- Current agricultural land use has maximized agricultural production at the expense of the tribal economy and way of life.
- Water is a critical element of fish habitat but not the only critical element.
- A negotiated settlement will likely need to address instream flow levels, fish habitat impacts, water quality impacts, and include enforcement/accountability measures.



Questions?



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